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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|----------------------|------------------|
| 10/733,934 | 12/10/2003 | Steven E. Atkin | CA920030023US1 | 8694 |
| 7590 04/19/2007 Diana L. Roberts International Business Machines Intellectual Property Law 11400 Burnet Road Austin, TX 78758 | | | EXAMINER HO, ANDY | |
| | | | ART UNIT 2194 | PAPER NUMBER |
| SHORTENED STATUTORY PERIOD OF RESPONSE | | MAIL DATE | DELIVERY MODE | |
| 3 MONTHS | | 04/19/2007 | PAPER | |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/733,934

Applicant(s)

ATKIN ET AL.

Examiner

Andy Ho

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/10/2003</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

1. This action is in response to the application filed 12/10/2003.
2. Claims 1-23 have been examined and are pending in the application.
3. Applicant cites numerous articles in the application (lines 10-11 page 2, lines 4-7 page 3). The copies of these articles are requested by the examiner so they can be fully considered.

Specification

4. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code (line 12 page 2, line 6 page 3). Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Silver U.S Patent No. 6,003,050 in view of York U.S Patent No. 6,675,371.

As to claim 1, Silver teaches a method of accessing a platform independent input method editor (accessing Java-based input method editors IMEs, Fig. 2, lines 9-58 column 10) from an underlying operating system (operating system 35, Fig. 2), comprising:

receiving keystrokes at an operating system-based input (receiving keystrokes from an author of a document via keyboard, lines 9-27 column 10);

forming a character sequence from said received keystrokes (keystrokes are translated into keyboard commands including ASCII code, lines 9-27 column 10);

from an IME service module (...a JAVA windows manager that translates the commands into Unicode keyboard commands that are understood by the other components of the JAVA virtual machine..., lines 29-32 column 10), calling said platform independent IME (calling HANDLE KEY interface method of IME, lines 28-43 column 14) to convert said character sequence to a corresponding code point (...IME receives the Unicode messages from the windows manager and translates the Unicode messages into the corresponding composed characters..., lines 3-21 column 6); and

transferring said code point to an operating system-based output (...IME then passes the composed character to the windows manager, which passes the composed character to the component for further manipulation by the user..., lines 18-21 column 6; composed characters being outputted to monitor 47 via operating system 35, Fig. 2).

Silver does not teach the IME service module of the Java virtual machine (JAVA windows manager of the JAVA virtual machine..., lines 29-32 column 10, Fig. 2) is an operating system-based IME service module. York teaches a Java virtual machine

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maybe embedded within an operating system that resides upon a machine, instead of installed onto the machine as a distinct application program. It would have been obvious at the time the invention was made to a person of ordinary skill in the art to have modified Silver reference to include the teachings of York reference because the concept of implementing a Java virtual machine within an operating system allows the flexibility of running bytecode on different platforms as disclosed by York (line 32 column 1 to line 30 column 2). The system of Silver as modified by York would include the JAVA windows manager of the Java virtual machine to be run as a component of the operating system for the advantage of running bytecode on different platforms as disclosed above.

As to claim 2, Silver as modified further teaches receiving said keystrokes at an active input control (receiving keystrokes from an author of a document via keyboard, lines 9-27 column 10) in an application associated with said operating system (an application program that runs on an operating system, lines 46-50 column 8).

As to claim 3, Silver as modified further teaches converting said received keystrokes to a first encoding format suitable for editing said keystrokes at said active input control, and for forming said character sequence (keystrokes are translated into keyboard commands including ASCII code, lines 9-27 column 10;....typically an ASCII code or value associated with the depressed key, and WM.sub.-- KEYUP--indicating that a key has been released. These keyboard commands are delivered to an application program 36, such as a word processing program, an editor, or the like..., lines 5-22 column 18).

As to claim 4, Silver as modified further teaches converting said character sequence to a second encoding format compatible with said platform independent IME (...keyboard commands are translated into Unicode keyboard commands that are understood by the other components of the Java virtual machine..., lines 29-41 column 10).

As to claim 5, Silver as modified further teaches wherein said platform independent IME is a Java-based Unicode IME (...IME receives the Unicode messages from the windows manager and translates the Unicode messages into the corresponding composed characters..., lines 3-21 column 6; Java-based input method editors IME 112 and 114, Fig. 2, lines 9-58 column 10), and said second encoding format is Unicode (...Unicode keyboard commands that are understood by the other components of the Java virtual machine..., lines 29-41 column 10).

As to claim 6, Silver as modified further teaches calling a Java IME character handling method via a Java interface (calling HANDLE KEY interface method of IME, lines 28-43 column 14) in a Java virtual machine (Java virtual machine 100, Fig. 2).

Silver as modified does not teach the Java interface is a Java Native Interface. York teaches the concept of using Java Native Interface JNI within a Java virtual machine (lines 15-30 column 2). It would have been obvious at the time the invention was made to a person of ordinary skill in the art to have modified Silver reference as modified to include the teachings of York reference because by using JNI within a Java virtual machine, the system allows Java code to communicate with native software

programs of different platforms as disclosed by York (line 32 column 1 to line 30 column 2).

As to claim 7, Silver as modified further teaches wherein said operating system is a Windows operating system (Microsoft Windows operating system, lines 52-62 column 1), and said Java IME character handling method is called from said operating system-based IME service module running on a Windows service manager (...a JAVA windows manager that translates the commands into Unicode keyboard commands that are understood by the other components of the JAVA virtual machine..., lines 29-32 column 10).

As to claims 8-9, they are computer system claims of claims 1-2, respectively. Therefore, they are rejected for the same reasons as claims 1-2 above.

As to claim 10, Silver as modified further teaches operating system-based device driver (keyboard driver 102 of operating system 35, Fig. 2) configured to form a character sequence from said keystrokes received from the user (...operating system 35 receives these keyboard commands at a keyboard driver 102, which translates the keyboard commands into keyboard commands..., lines 9-27 column 10), and to transfer said character sequence to said operating system-based IME service module (commands are received by Java windows manager, lines 29-41 column 10).

As to claims 11-15, they are computer system claims of claims 3-7, respectively. Therefore, they are rejected for the same reasons as claims 3-7 above.

As to claims 16-19, they are computer system claims of claims 1-2, 10 and 3, respectively. Therefore, they are rejected for the same reasons as claims 1-2, 10 and 3 above.

As to claims 20-23, they are computer program product claims of claims 1-4, respectively. Therefore, they are rejected for the same reasons as claims 1-4 above.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andy Ho whose telephone number is (571) 272-3762. A voice mail service is also available for this number. The examiner can normally be reached on Monday – Friday, 8:30 am – 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on (571) 272-3718.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIM) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2100.

Any response to this action should be mailed to:

Commissioner for Patents

P.O Box 1450

Alexandria, VA 22313-1450

Or fax to:

- AFTER-FINAL faxes must be signed and sent to (571) 273 - 8300.
- OFFICAL faxes must be signed and sent to (571) 273 - 8300.
- NON OFFICAL faxes should not be signed, please send to (571) 273 - 3762

A.H

April 16, 2007

A handwritten signature in black ink, appearing to read "Andy", with a long horizontal flourish extending to the right.